In the Claims

The status of claims in the case is as follows:

1. [Previously presented] Method for evaluating a network, comprising:

executing a plurality of burst tests to determine a network's current streaming speed, wherein each said burst test includes

transmitting a burst including a plurality of packets over said network to a receiver;

determining a time of receipt by said receiver of each said packet in said burst;

determining a total receipt time by said receiver of all packets in said burst; and

discarding any burst in which all packets in said burst have not been received back and are not in the order said packets were transmitted;

calculating an average receipt time of all bursts not discarded; and

responsive to said average receipt time calculating a current speed of said network.

2. [Previously presented] The method of claim 1, further comprising:

evaluating a maximum speed of said network as a function of a best observed time of receipt for said bursts not discarded.

3. [Previously presented] The method of claim 2, further comprising a step of:

responsive to detecting several instances of said time of receipt representing current speeds close to said maximum speed, determining that testing has stabilized.

4. [Previously presented] The method of claim 1, further comprising:

constructing a logical best burst from packets in said

bursts not discarded; and

evaluating streaming speed of said network as a function of a total number of bits in said logical best burst and total receipt time of said logical best burst.

5. [Previously presented] The method of claim 4, each said burst including at least i packets, and said constructing comprising:

selecting a best time of receipt of each nth (n=1,2...i) packet of said bursts not discarded; and

constructing as said logical best burst a burst comprising i packets of packets n=1,2...i selected as having best times of receipt.

6. [Canceled]

7. [Previously presented] The method of claim 2, further comprising a step of:

calculating an average streaming utilization percent by

taking a ratio of the current speed of said network to the streaming speed of said network.

8. [Previously presented] The method of claim 7, further comprising a step of:

adjusting average streaming utilization for occurrences of burst frame discards.

9. [Previously presented] The method of claim 1, said transmitting step including a transmission of complex bursts in which short and long frames are transmitted per test iteration.

10. [Previously presented] The method of claim 9, further comprising a step of determining the streaming speed of said network by dividing a difference in size of said short frames and said long frames by a difference in transmission time between short frames and long frames.

11. [Currently amended] Method for establishing network characteristics including an historical, current, and predicted future of states of a network for all types of network traffic, including interactive, browser, batch, and

realtime traffic, comprising the steps of:

transmitting probative packets into said network, said packets including echoed and non-echoed packets, of like and differing lengths, of like and differing network priority, individually and in bursts;

discarding any burst in which all packets in said burst have not been received back and discarding any burst in which any packets are received out of the order in which they were transmitted;

measuring transit times of said probative packets;

calculating an average receipt time of all bursts not discarded;

responsive to said average receipt time calculating a current speed of said network; and

responsive to said transit times and said current speed, determining capacity and utilization of said network and of a component end processor and network parts for deriving a streaming speed of said network.

12. [Previously presented] System for evaluating the characteristics of a network, comprising:

a send node for communicating probative packets into said network, said packets including burst packets;

a receive node for determining that frames of said packets are received in sequence and without retransmission, and an elapsed time between first through last frames of said packets;

a speed analysis application node responsive to said elapsed time and a size of said packets for calculating network speed.

13. [Previously presented] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for evaluating characteristics of a network, said method steps comprising:

communicating probative packets into said network, said

packets including burst packets;

determining at a receiver of said packets that frames of said packets are received in sequence and without retransmission, and an elapsed time between first through last frames of said packets;

responsive to said elapsed time and a size of said packets calculating network speed.

14. [Currently amended] An article of manufacture comprising:

a computer useable medium having computer readable program code means embodied therein for evaluating a network, the computer readable program means in said article of manufacture comprising:

computer readable program code means for causing a computer to effect executing a burst test to determine a network's streaming speed, wherein each said burst test includes

transmitting a plurality of packets over said

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network to a receiver;

discarding any burst in which all packets in said burst have not been received back and discarding any burst in which any packets are received out of the order in which they were transmitted; and

determining a time of receipt of each said packets by said receiver;

calculating an average receipt time of all bursts not discarded;

computer readable program code means for causing a computer to effect responsive to said average receipt time ~~of receipt of each said packets~~, calculating capacity and utilization of said network and of a component end processor and network parts for deriving a current speed of said network.

15. [Currently amended] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine for evaluating characteristics of a

network, said instructions comprising:

transmitting probative packets into a network, said packets including echoed and non-echoed packets, of like and differing lengths, of like and differing network priority, individually and in bursts;

discarding any burst in which all packets in said burst have not been received back and discarding any burst in which any packets are received out of the order in which they were transmitted;

measuring the transit times of said probative packets;

calculating an average receipt time of all bursts not discarded;

responsive to said average receipt time calculating a current speed of said network; and

responsive to said transit times and said current speed, determining capacity and utilization of said network and of a component end processor and network parts for deriving a streaming speed of said network.

16. [Previously presented] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform operations for evaluating characteristics of a network, said operations comprising:

executing a plurality of burst tests to determine a network's current speed, wherein each said burst test includes

transmitting a burst including a plurality of packets over said network to a receiver;

determining a time of receipt by said receiver of each said packet in said burst;

determining a total receipt time by said receiver of all packets in said burst; and

discarding any burst in which all packets in said burst have not been received back and are not in the order said packets were transmitted;

calculating an average receipt time of all bursts not

discarded; and

responsive to said average receipt time calculating a current speed of said network.

17. [Previously presented] The program storage device of claim 16, said operations further comprising:

evaluating a maximum speed of said network as a function of a best observed time of receipt for said bursts not discarded.

18. [Previously presented] The program storage device of claim 17, said operations further comprising:

responsive to detecting several instances of said time of receipt representing current speeds close to said maximum speed, determining that testing has stabilized.

19. [Previously presented] The program storage device of claim 16, said operations further comprising:

constructing a logical best burst from packets in said bursts not discarded; and

evaluating streaming speed of said network as a function of a total number of bits in said logical best burst and total receipt time of said logical best burst.

20. [Previously presented] The program storage device of claim 19, each said burst including at least i packets, and said operations further comprising:

selecting a best time of receipt of each nth (n=1,2...i) packet of said bursts not discarded; and

constructing as said logical best burst a burst comprising i packets of packets n=1,2...i selected as having best times of receipt.

21. [Previously presented] The program storage device of claim 16, said operations further comprising:

calculating an average streaming utilization percent by taking a ratio of network streaming speed to average network streaming speed.

22. [Previously presented] The program storage device of

claim 21, said operations further comprising:

adjusting average streaming utilization for occurrences of burst frame discards.

23. [Previously presented] The program storage device of claim 16, said transmitting operation including a transmission of complex bursts in which short and long frames are transmitted per test iteration.

24. [Previously presented] The program storage device of claim 23, said operations further comprising:

determining streaming speed of said network by dividing a difference in size of said short frames and said long frames by a difference in transmission time between short frames and long frames.

25. [Previously presented] Method for evaluating a network, comprising:

executing a a plurality of burst tests to determine a network's current speed, wherein each said burst test includes

transmitting a burst including a plurality of packets over said network to a receiver;

determining a time of receipt by said receiver of each said packet in said burst;

determining a total receipt time by said receiver of all packets in said burst; and

discarding any burst in which all packets in said burst have not been received back and discarding any burst in which all packets are not in the order said packets were transmitted;

calculating an average receipt time of all bursts not discarded;

responsive to said average receipt time calculating a current speed of said network;

evaluating a maximum speed of said network as a function of a best observed time of receipt for said bursts not discarded; and

responsive to detecting several instances of said time of receipt representing current speeds close to said maximum speed, determining that testing has stabilized.